

REMARKS

In the last Office Action, claims 1, 3, 4, 6 and 8 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,760,896 to Suzuki. Claims 2 and 9 were rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Suzuki. Claims 5 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of U.S. Patent No. 5,870,178 to Egawa, and claims 7 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of U.S. Patent No. 5,196,900 to Petterson. Claims 12-20 were allowed.

Acknowledgement was made of applicants' claim for foreign priority under 35 U.S.C. §119, as well as receipt of the priority documents thereby perfecting the foreign priority claim.

Applicants and applicants' counsel acknowledge with appreciation the allowance of claims 12-20.

In accordance with this amendment, independent claim 1 has been amended in a very minor respect to define with more particularity the inclination-angle computing section to more clearly patentably differentiate the claim from the prior art. The inclination angle of the screen described and claimed in the present application is totally and fundamentally different

from the inclination angle of the contrast disclosed by Suzuki. Claim 1 has been amended herein to make this difference unequivocally clear, and as amended, claim 1 recites that the inclination-angle computing section computes an inclination angle of the screen relative to a direction of the baseline length in a plane that includes the baseline and the different directions. As explained below, no corresponding inclination-angle computing section is disclosed or suggested by Suzuki or the other references of record.

The amendment made to claim 1 simply makes explicit that which was previously implicit in the claim. Thus the amendment does not raise a new issue that would require further search or consideration. Applicants respectfully request entry of this amendment, which is deemed warranted under the provisions of 37 C.F.R. §1.116.

The primary reference to Suzuki pertains to a distance measuring device capable of accurately and easily performing a distance measurement even under circumstances when a subject being photographed has all sorts of shapes, including various angular contrast edges (see column 2, lines 22-25). Suzuki describes that during assembly of a passive-type distance measuring device, it often happens that the base length direction and the detecting direction are not aligned with each other so that the measured values of a pair

of left and right photoelectric conversion elements will differ even though the photographic subject is at the same distance. Thus during assembly, the shift between the base length direction and the detecting direction is mechanically adjusted. While such an adjustment is effective when a photographic subject has a simple, straight contrast edge, it is not effective when the photographic subject includes a wide variety of angular contrast edges or consists of all sorts of shapes (see paragraph bridging columns 1-2).

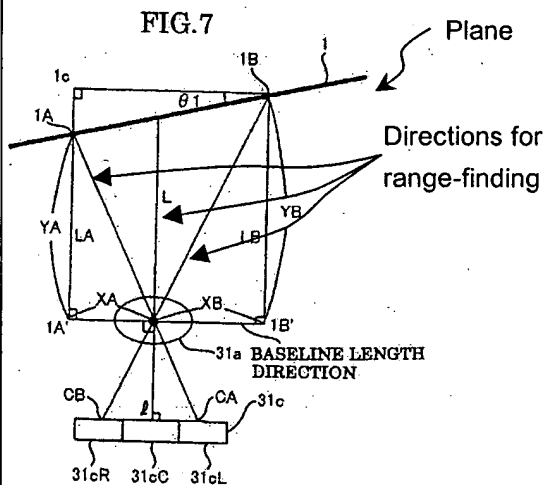
Suzuki seeks to overcome this problem by providing a distance measuring device in which even when the image of the photographic subject has been shifted vertically with respect to the photoelectric conversion elements, the image information of the same portion of the photographic subject is virtually generated by an image information generating section whereby the distance to the subject is calculated by processing the generated image information (column 2, lines 10-21). According to Suzuki, the distance measuring device is capable of correcting an error based on a vertical image shift which varies according to a variation in the distance of the photographic subject (column 2, lines 33-37). In one embodiment, Suzuki arranges photoelectric conversion element arrays and optical distance measuring systems horizontally and vertically in the form of a cross and uses the distance

measurement result which is smaller as between a distance measuring device in a horizontal direction and a distance measuring device in a vertical direction as to the inclination of a contrast portion of the photographic subject with respect to the photoelectric conversion element arrays (column 2, lines 38-49). In this regard, the "inclination" referred to by Suzuki is the inclination of the contrast portion of the photographic subject, not inclination of a screen as in the present invention.

According to Suzuki, the distance measuring device comprises upper and lower photoelectric conversion element arrays arranged with respect to a pair of photographic subject images for detecting the pair of photographic subject images of the same portion of the photographic subject, an image information generating section for generating image information in the same direction as an image shift direction between the photographic subject images of the same portion of the photographic subject by processing left image information and right image information converted photoelectrically by the photoelectric conversion element arrays, and an image shift quantity detecting section for detecting a shift quantity between the photographic subject images of the same portion of the photographic subject, based on a pair of left image information and right image information generated by the image

information generating section (paragraph bridging columns 2-3).

Suzuki discloses two basic embodiments of the distance measuring device, one in Fig. 1 which uses one pair of left and right lenses 1 and another in Fig. 22 which utilizes four lenses 1. The principle of operation is the same in both embodiments. In describing the principle of operation of the Suzuki distance measuring device, reference will be made to the explanatory diagram of Fig. 9 of Suzuki reproduced below. For comparison purposes, Fig. 7 of the present application is also reproduced below.

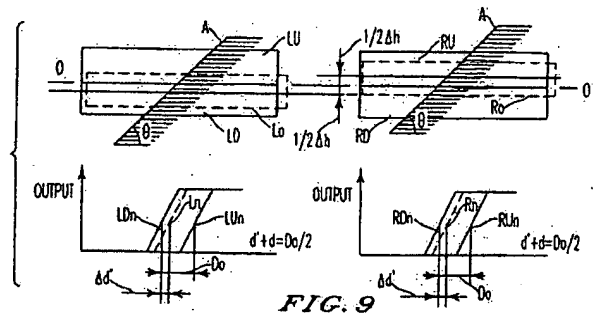


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As can be seen from Fig. 9 of Suzuki, the varying portion A of the contrast of the photographic subject is inclined at an angle θ relative to the direction of the baseline length in a plane that includes the conversion elements Lu and Ru. Thus it can be appreciated that as used throughout the Suzuki reference, the phrase "inclination of the contrast portion" or inclination angle of the contrast of the photographic subject means a rotation angle around an optical axis entering into the conversion element Lu or Ru. This is totally different from the "inclination angle of the screen" as described in the present application and recited in independent claim 1.

In accordance with the present invention as shown in Fig. 7, the inclination angle θ_1 of the screen 1 refers to the screen 1 being inclined at an angle θ_1 relative to the direction of the baseline length in a plane that includes the baseline and the different directions for range-finding. Stated otherwise, the inclination angle θ_1 of the screen 1 is the angle through which the screen 1 inclines in a direction of the optical axis which enters into the conversion elements 31c. Thus it can be seen that the inclination angle of the screen 1 in the present invention and the inclination angle of the contrast in Suzuki are totally different from one another. This difference is clearly set forth in amended claim 1, which

specifies that the computed inclination angle of the screen relative to a direction of the baseline length is in a plane that includes the baseline and the different range-finding directions.


There is no teaching or suggestion whatsoever in Suzuki, or in Egawa, Petterson or the other references of record, that would have led one skilled in the art to modify Suzuki in the manner that would be required to meet the terms of amended claim 1. Applicants respectfully submit that independent claim 1 together with the claims dependent thereon clearly patentably distinguish over the prior art of record. Accordingly, reconsideration and withdrawal of the rejection of claims 1-4 and 6-10 are respectfully requested.

In view of the foregoing, the application is now believed to be in allowable form. Accordingly, favorable reconsideration and entry of this amendment together with passage of the application to issue are respectfully requested.

Respectfully submitted,

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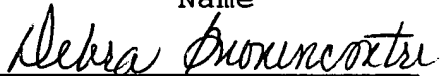
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Debra Buonincontri

Name



Signature

August 4, 2005

Date